24h QuAALity
Quality assurance in 24h-caregiving at home by means of digital support
> Funding:
> Austrian Research Promotion Agency (FFG), Austrian Ministry of Transport, Innovation and Technology

> Consortium:
> University of Applied Sciences – Fachhochschule Campus Wien (Department Nursing Science, Department Engineering, Department Health Sciences, Teaching Support Center, Online Services)

> External project partners:
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  > ipb - Institut für Personenbetreuung,
  > Home-Care-Management ALEXANDER WINTER e.U.,
  > SMART ASSETS Development GmbH,

> Project Duration: 2019 – 2021
Providing older people with 24h-care at home

- 24-hour care is a cornerstone of home care for older people.
- 30,000 older people in Austria use a 24h-caregiver together or as an alternative to family care and mobile care (Statistik Austria, 2018).
- More than 60,000 24h-caregivers, primarily from Slovakia, Hungary and Romania, work in private households and flats in Austria. They commute in a two-week rhythm between Austria and their home country (WKO, 2018).
- The people to be cared for need support for housekeeping activities, up to high need for round-the-clock care (Bauer, Österle, 2013).
Providing older people with the 24h care at home

> Burdening conditions in the 24h caregiving at home

- Low language skills
- Low specific training
- Isolated working conditions with chronically ill people
- Only everyday care is permitted, but it is often necessary to do specific nursing care
- Specific nursing care is only permitted with appropriate training or after being delegated by a certificated nurse or doctor (Haslinger-Baumann, 2019)
- No sufficient comprehensive quality control is in place (Rechnungshofbericht, 2018)
24h QuAALity – project aims

Development and evaluation of a distributed client-server software solution for the support and quality assurance of 24h-caregivers at home.
24h QuAALity – project aims

The application software contains:

1. Information and education portal (e-Learning)
2. Comprehensive electronic care documentation
3. Integrated emergency management
4. Links to translation pages or networking opportunities

Four Languages: German, Slovakian, Hungarian and Romanian
24h QuAALity target groups

> **Primary users**: elderly people who are cared for

> **Secondary users and direct addressees of the technical application**: 24h-caregivers

> and:
> > Relatives
> > Placement Agencies for 24h Caregivers
> > Certificated Nurses
24h QuAALity – project development

1. phase
• User-needs analysis, participation and survey of users’ needs in relation to two target groups

2. phase
• Design and development of the distributed client-server software solution

3. phase
• Evaluation of the prototype during application in 24h-caregiving
Phase 1: User-needs analysis, participation and survey of users’ needs in relation to two target groups
Research methods in Phase 1

> **Survey methods (exploration phase) - user needs**
>  - Guided individual interviews: (45: 18 care workers, 3 nurses, 24 clients)
>  - Focus group interview (1: 4 care workers)
>  - Cultural probe studies (2)
>  - Analysis of caring documentation (4)

> **Evaluation methods (exploration phase)**
>  - Thematic Analysis (Kuckartz 2008)
>  - Qualitative Text Analysis (Kuckartz, 2016)

> **Recruitment of participants**
>  - Purposive sampling (gatekeepers of different organizations)
Results of Phase 1

> Information and education portal (e-learning):

> Need for information on major diseases faced in the 24h care at home, such as dementia, diabetes and stroke
> Information should be shown in German and additional text and/or subtitles also in Slovakian, Hungarian and Romanian
> Short videos with short texts on the most important diseases – in German due to high willingness to learn German
> E-learning is a good form of learning because it is time- and place-independent.
Results of Phase 1

> **Comprehensive electronic care documentation:**

- People in need of profound care require a higher documentation effort.
- It is difficult to complete the documentation because the 24h caregivers are confronted with complex caring situations.
- Lack of German skills is a hurdle when filling in the documentation.
- A simple way of documentation is preferred.
Results of Phase 1

> Integrated emergency management:

- The emergency call system is often used to get help quickly.
- The form of communication is different in families, not all of them have clear guidelines of communication.
- Not all 24h caregivers know the emergency number 144.
- There is a lack of knowledge about the client's data, e.g. previous illnesses.
Results of Phase 1

> Links to translation pages or networking opportunities:

- Google Translation is often used, but the translations are sometimes incorrect.
- Translations are also carried out simultaneously in conversations.
- Much used communication possibilities are online: Facebook (groups and messengers), WhatsApp, Viber and Instagram.
- Video calls, sending photos and voice messages.
Phase 2: Design and development of the distributed client-server software solution
Results of Phase 2 – further outlook

- Development of e-learning content, a caring documentation system, an emergency system and a networking platform
- Phase 2 will start in autumn 2019
- Well-known companies will develop the product
Phase 3: Evaluation of the prototype during application in 24h care
Results of Phase 3 - future outlook

> Longitudinal 12-month evaluation involving more than 100 households facilitating 24h care

The following parameters are going to be evaluated with the users:

- Technical performance of the prototype in 24h care
- Usability of the solution
- Acceptance factors such as frequency of use, expected effects on the quality of life and perceived usefulness for primary and secondary users
- Effects on health literacy and health behavior of the 24h caregivers and older people in everyday caring routine
Thank you for your attention!